

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/14263

Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: 13

because they relate to subject matter not required to be searched by this Authority, namely:

The inventions as set forth in claim 13 pertains to methods for treatment of the human body by therapy. (Article 17(2) (a) (i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT)

2. Claims Nos.:

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

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A. CLASSIFICATION OF SUBJECT MATTER
 Int.Cl' A61K38/57, A61P1/02, 3/14, 19/10, 31/04, 31/12, 35/00, 43/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl' A61K38/00-38/58, 45/00-45/08, A61P1/00-43/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 DDBJ/GanBank/EMBL, SwissProt/PIR/PDB, GeneSeq, MEDLINE (STN),
 EMBASE (STN), BIOSIS (STN), BIOTECHABS (STN), CAPLUS (STN), WPI (DIALOG),
 JSTPLUS (JOIS), JMEDPLUS (JOIS)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LEE, H.S., LEE, K.J. Cathepsin B inhibitory peptides derived from β -casein. Peptides, 2000, 21, pages 807 to 809; full text	1, 2, 5, 6, 7-9, 14, 15, 18-20, 21, 22
Y		10-12, 23, 24
A		3, 4, 16, 17
Y	EP 679659 A1 (TAIHO PHARMACEUTICAL CO., LTD.), 02 November, 1995 (02.11.95), Full text & JP 7-179496 A & WO 95/13302 A1 & AU 9480674 A & NO 9502748 A & US 5698519 A	10-12, 23, 24
Y	JP 7-242600 A (Yoshimitsu NAGAO), 19 September, 1995 (19.09.95), Full text (Family: none)	10-12, 23, 24

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier document but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 15 December, 2003 (15.12.03)	Date of mailing of the international search report 13 January, 2004 (13.01.04)
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Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer
Facsimile No.	Telephone No.

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International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 9-221425 A (Taiho Pharmaceutical Co., Ltd.), 26 August, 1997 (26.08.97), Full text (Family: none)	10-12,23,24
Y	WO 98/49152 A1 (SMITHKLINE BEECHAM CORP.), 05 November, 1998 (05.11.98), Claims & JP 2002-501502 A & ZA 9803479 A & AU 98713995 A & EP 977743 A1	10-12,23,24
Y	JP 2001-139534 A (Yoshimitsu NAGAO), 22 May, 2001 (22.05.01), Full text (Family: none)	10-12,23,24
Y	JP 2000-72797 A (Taiho Pharmaceutical Co., Ltd.), 07 March, 2000 (07.03.00), Claims (Family: none)	10-12,23,24
Y	EP 822260 A1 (Taiho Pharmaceutical Co., Ltd.), 04 February, 1998 (04.02.98), Claims & WO 97/31122 A1 & AU 9717340 A & US 5914348 A & KR 99007955 A	10-12,23,24
Y	JP 7-2896 A (Snow Brand Milk Products Co., Ltd.), 06 January, 1995 (06.01.95), Full text (Family: none)	10-12,23,24
Y	JP 7-126294 A (Snow Brand Milk Products Co., Ltd.), 16 May, 1995 (16.05.95), Full text (Family: none)	10-12,23,24
Y	MATSUOKA, Y. et al., Cystatin C in Milk Basic Protein (MBP) and Its Inhibitory Effect on Bone Resorption, <i>in Vitro</i> , <i>Biosci.Biotechnol.Biochem.</i> , 2002, 66(12), pages 2531 to 2536; particularly, summary	10-12,23,24
Y A	Beta casein precursor. [online]. SWISS-PROT, 1988. [retrieved on 2003-12-12]. Retrieved from JPO DNA Database. Accession No. P05814	2,15 1,3-12,14, 16-24
A	Beta casein precursor. [online]. SWISS-PROT, 1986. [retrieved on 2003-12-12]. Retrieved from JPO DNA Database. Accession No. P02666	1-12,14-24

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
L	JP 5-184382 A (Kyodo Nyugyo Kabushiki Kaisha), 27 July, 1993 (27.07.93), (Family: none) (It is disclosed in this document that activity of α -, β - and κ -casein as cysteine protease inhibitor is 0%).	1-12,14-24
L	SUZUKI, J., KATOH, N., Cysteins Protease in Bovine Milk Capable of Hydrolyzing Casein as the Substrate and Elevation of the Activity during the Course of Mastitis., Jpn.J.Vet.Sci., 1990, 52(5), pages 947 to 954 (It is disclosed in this document that casein is hydrolyzed by cysteine protease.)	1-12,14-24
A	JP 8-81388 A (Morinaga Milk Industry Co., Ltd.), 26 March, 1996 (26.03.96), (Family: none)	1-12,14-24
A	EP 1040833 A1 (SNOW BRAND PRODUCTS, LTD.), 04 October, 2000 (04.10.00), & JP 2000-281587 A & NZ 503608 A & AU 200022633 A	1-12,14-24
A	WO 95/32728 A1 (ABBOTT LABORATORIES), 07 December, 1995 (07.12.95), & JP 10-500101 A & EP 760673 A & AU 9521293 A & US 5643880 A & US 5707968 A & MX 9605829 A1	1-12,14-24
A	WO 95/32727 A1 (ABBOTT LABORATORIES), 07 December, 1995 (07.12.95), & JP 10-500100 A & EP 760674 A1 & AU 9521920 A & US 5506209 A & US 5538952 A & BR 1101102 A3 & MX 9605830 A1 & NZ 329311 A	1-12,14-24
A	JP 6-128287 A (Nisshin Flour Milling Co., Ltd.), 10 May, 1994 (10.05.94), (Family: none)	1-12,14-24
P,X	OHASHI, A. et al., New functions of lactoferrin and β -casein in mammalian milk as cysteine protease inhibitors., Biochem.Biophys.Res.Commun., 2003, 306, pages 98 to 103; full text	1-12,14-24